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APPLICATION NO:	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,924	11/22/2000	Timothy Roy Block	ROC9-2000-0123-US1	2147

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EXAMINER

EDELMAN, BRADLEY E

ART UNIT PAPER NUMBER

2153

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/718,924

Applicant(s)

BLOCK, TIMOTHY ROY

Examiner

Bradley Edelman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-3.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

This Office action is a first action on the merits of this case. Claims 1-12 are presented for examination.

Specification

1. The disclosure is objected to because of the following informalities:
 - a. On p. 5, line 8, the reference to the "header in Fig. 12" does not correspond to the drawing, because no explicit "header" is shown in Fig. 12. It appears that the term "Fig. 12" on line 8 should read "Fig. 11."
 - b. On p. 16, line 7, the phrase "to be intermingles" contains incorrect grammar. The phrase should read, "to be intermingled."

Appropriate correction is required.

Claim Objections

2. Claims 1 and 6 are objected to because of the following informalities: Each of claims 1 and 6 includes multiple phrases separated by semi-colons, but omits the conjunction "and" before the final phrase. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ywoskus et al. (U.S. Patent No. 5,528,605, hereinafter "Ywoskus").

In considering claim 1, Ywoskus discloses an apparatus ("Master," col. 3, line 46) comprising:

At least one processor (inherent in the master server), a memory coupled to the at least one processor (also inherent), and a network interface ("Ethernet") that couples the apparatus to a network ("local area network," col. 3, line 33) that is coupled to at least one other computer system ("slave computers," col. 4, lines 3-4; Fig. 1); and

A cluster communication mechanism residing in the memory and executed by the at least one processor (all inherent to allow the master to communicate with the cluster of connected computers), the cluster communication mechanism including a sliding send window that communicates at least one ordered message (i.e. message with "sequence number," col. 5, lines 57-59) to at least one other computer system without waiting for an acknowledge message from the at least one other computer system before sending out the next ordered message (col. 9, line 55 – col. 10, line 5; summarized in col. 2, lines 40-42, "the apparatus has a means for the master to send a plurality of messages to the slave computer without receiving an acknowledgment").

In considering claim 2, Ywoskus further discloses that each ordered message includes a header ("Message Header field 202," col. 5, line 15) with information that indicates whether an acknowledge message for the ordered messages may be delayed

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and grouped with at least one subsequent acknowledge message (col. 6, lines 1-10, "with the Response Requested bit 234 CLEAR, then the CLEAR bit indicates that a delayed acknowledgment to receipt of message 200 is satisfactory for the transmitting master station"). See also, col. 2, lines 42-47: "means for the slave computer to delay sending a group acknowledgment that at least a first group of the plurality of messages were received."

In considering claim 3, Ywoskus further discloses that the acknowledge message acknowledges from one to a plurality of ordered messages (i.e. a "group" of messages, col. 2, lines 40-47; wherein each messages is ordered according to a "sequence number," col. 5, lines 55-59).

In considering claim 4, Ywoskus discloses a networked computer system comprising:

A cluster of computer systems (col. 3, lines 46-50, wherein one system of the cluster includes Master 120 and devices 140, 142, 144, etc.; col. 3, lines 60-65, wherein another system of the cluster includes Master 130 and devices 150, 152, 154, etc.) that each includes:

A network interface ("Ethernet") that couples each computer system via a network ("local area network," col. 3, line 33) to other computer systems in the cluster ("slave computers," and other connected computer devices, col. 4, lines 3-13; Fig. 1), and a memory (inherent in the master server); and

A cluster communication mechanism residing in the memory (inherent to allow the master to communicate with the cluster of connected computers), the cluster communication mechanism including a sliding send window that communicates at least one ordered message (i.e. message with "sequence number," col. 5, lines 57-59) to at least one other computer system without waiting for an acknowledge from the at least one other computer system before sending out the next ordered message (col. 9, line 55 – col. 10, line 5; summarized in col. 2, lines 40-42, "the apparatus has a means for the master to send a plurality of messages to the slave computer without receiving an acknowledgment").

In considering claim 5, Ywoskus further discloses that each ordered message includes a header ("Message Header field 202," col. 5, line 15) with information that indicates whether an acknowledge message for the ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 6, lines 1-10, "with the Response Requested bit 234 CLEAR, then the CLEAR bit indicates that a delayed acknowledgment to receipt of message 200 is satisfactory for the transmitting master station"). See also, col. 2, lines 42-47: "means for the slave computer to delay sending a group acknowledgment that at least a first group of the plurality of messages were received."

In considering claim 6, Ywoskus discloses a computer-implemented method for processing a task (i.e. responding to a data message) in a clustered computing

environment (col. 3, lines 46-65; Fig. 1, describing the clustered computing environment), the method comprising the steps of:

Providing a cluster communication mechanism executing on a first computer system ("Master 120,") in a cluster that includes a sliding send window that communicates at least one ordered message (i.e. message with "sequence number," col. 5, lines 57-59) to at least one other computer system in the cluster without waiting for an acknowledgment from each computer system in the cluster that received an ordered message before sending out the next ordered message (col. 9, line 55 – col. 10, line 5; summarized in col. 2, lines 40-42, "the apparatus has a means for the master to send a plurality of messages to the slave computer without receiving an acknowledgment");

The cluster communication mechanism sending a first ordered message to at least one other computer system in the cluster (col. 5, lines 15-24, 53-59, wherein the message having a "sequence number" is sent to the "receiving station"); and

In considering claim 7, Ywoskus further discloses that the at least one other computer system in the cluster responds to the first and second ordered messages by sending a single acknowledge message to the cluster communication mechanism that acknowledges both the first and second ordered messages (col. 6, lines 1-10, "with the Response Requested bit 234 CLEAR, then the CLEAR bit indicates that a delayed acknowledgment to receipt of message 200 is satisfactory for the transmitting master station"). See also, col. 2, lines 42-47: "means for the slave computer to delay sending

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a group acknowledgment that at least a first group of the plurality of messages were received.”

In considering claim 8, Ywoskus further discloses that the first and second ordered messages each include a header (“Message Header field 202,” col. 5, line 15) with information that indicates whether an acknowledge message for the ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 6, lines 1-10, “with the Response Requested bit 234 CLEAR, then the CLEAR bit indicates that a delayed acknowledgment to receipt of message 200 is satisfactory for the transmitting master station”). See also, col. 2, lines 42-47: “means for the slave computer to delay sending a group acknowledgment that at least a first group of the plurality of messages were received.”

In considering claim 9, Ywoskus discloses a program product comprising a computer program (both inherent to run the processes in the master server) comprising:

A cluster communication mechanism that includes a sliding send window that communicates at least one ordered message (i.e. message with “sequence number,” col. 5, lines 57-59) to at least one other computer system in a cluster (“slave computers,” col. 4, lines 3-4; Fig. 1) without waiting for an acknowledge message from the at least one other computer system before sending out the next ordered message (col. 9, line 55 – col. 10, line 5; summarized in col. 2, lines 40-42, “the apparatus has a

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means for the master to send a plurality of messages to the slave computer without receiving an acknowledgment"); and

Computer-readable signal bearing media bearing the computer program
(inherent to store the computer program at the server).

In considering claim 10, Ywoskus further discloses that the signal bearing media comprises recordable media (inherent to store the program at the server).

In considering claim 11, Ywoskus further discloses that the signal bearing media comprises transmission media (inherent to transmit instructions performed by the program).

In considering claim 12, Ywoskus further discloses that each ordered message includes a header ("Message Header field 202," col. 5, line 15) with information that indicates whether an acknowledge message for the ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 6, lines 1-10, "with the Response Requested bit 234 CLEAR, then the CLEAR bit indicates that a delayed acknowledgment to receipt of message 200 is satisfactory for the transmitting master station"). See also, col. 2, lines 42-47: "means for the slave computer to delay sending a group acknowledgment that at least a first group of the plurality of messages were received."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

For all correspondences: (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Bradley Edelman

BE
February 26, 2004